

## THE PLOTTER

CLACKAMAS COUNTY AREA T/S  
USERS GROUP  
NEWS LETTER

\*\*\*\*

VOLUME 9                      \*\*                      NUMBER 1

\* \* \* \* \*

JANUARY 1991

EDITED BY:	DICK WAGNER
CHAIRMAN:	KEN LUTES
V/CHAIRMAN:	GAYLEN BENCH
SECRETARY:	BETTY SCHAFFLER
TREASURER:	ROD GOWEN
PR OFFICER:	BOB EVANS
LIBRARIANS:	JACK ARMSTRONG
	BILL DUNLOP
	TERRY GRAHAM

\*\*\*\*\*

## MEETING

The JANUARY meeting will be:

on: FRI., JAN 11, 1991

meeting open at: 7:00 P.M.

in: COMMUNITY ROOM

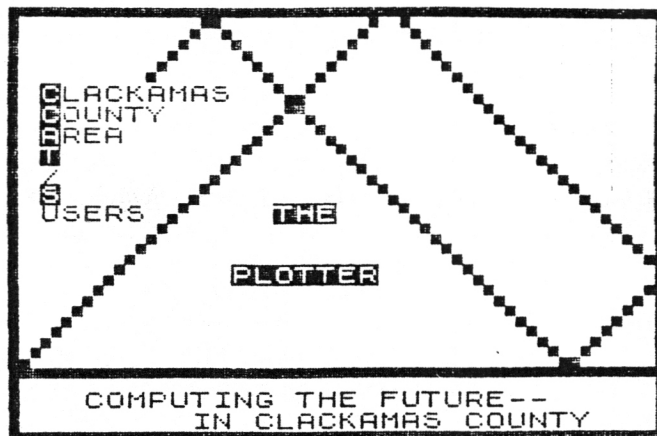
FAR WEST FEDERAL S.L.

OREGON CITY SHOPPING CENTER

\*\*\*\*\*

## WHAT YOU WILL FIND IN THIS ISSUE

Meeting-----	1
Index-----	1
Editorial-----	1,2
Minutes-----	2
Bits & Bytes-----	2,3
Mike's Notebook-----	3,4
Using Point!-----	4,5,6
The Plotter PC Page-----	7
Using BASIC with MS-DOS-----	7,8
Ski Run Program-----	9
Maze Program-----	9,10
From The Editor's Desk-----	10
Notice-----	10
Ads/Subscription-----	10



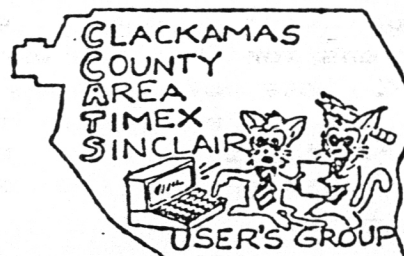
## EDITORIAL

Our monthly newsletter is starting into its 9th year of uninterrupted publication. The Editor is the second one to take on this monthly task. Rod Gowen was the first editor with the assistance of Dennis Juries. Later, I volunteered to help Rod, and ultimately, took on the duties of Editor.

Maintaining a monthly publication is quite essential to maintaining our organization. There are several important reasons for this. While we mostly meet on the second Friday of the month, the availability of our meeting room is only assured if a reservation is made in time. With a one month in advance reservation, we sometimes find a reservation in ahead of ours. Thus our newsletter carries this important information.

With about a 50% attendance at meetings, various reports in the newsletter indicated what has happened at meetings. Plus release of information on products, people, and nation wide activity in the TS groups. Even though some of these people seldom come to meetings for various reasons, this medium helps to keep them informed. We keep an

>> >> >>



Continued from page 1  
open mind on attendance as long as there are enough members at meetings to conduct business.

At present we are on an exchange basis with 12 other user groups. These are our pipelines to TS activity. It is rather discouraging to get return newsletters only a few times a year from some of these groups. I well know the problem of lack of material to turn out a decent publication. Granted that at times our publication is rather skimpy in programs, but we also do not get member input to any degree.

For the Clackamas County Area T/S User group, it is doubtful that we could keep a viable group together without this important publication. I just hope that I can keep it going, and get it published before the first of each month. There is a substantial number that are mailed each month, and these also get out on time. We certainly intend to keep this policy in effect as long as it is possible.

The Editor

## DECEMBER MINUTES

The December meeting was held at Jack Armstrong's home.

Jack was nominated acting Chairman as there were no officers in attendance. The meeting opened at 8:40 with 8 members present.

The first and only business to be conducted was the nomination of officers. Jack pointed out that only two officers would be elected as Rod Gowen had volunteered to continue the position of Treasurer. Also as Dick Wagner volunteered previously to take the Secretary position, that left Chairman and Vice Chairman positions.

Jack Armstrong was nominated for Chairman and was seconded. Nominations for Chairman were closed by 100% vote of members there. Nominations were opened for Vice Chairman. Bill Dunlop was nominated for this position and was seconded.

Nominations for this position were closed by 100% vote of members present.

Some discussion ensued concerning someone volunteering to take over the Librarian position that Jack held. As it consisted of reviewing newsletters and cataloging items of interest in the library data base, Alice Dunlop volunteered.

The matter of dues was brought up. As the By Laws sets dues at \$15.00, this would be something to discuss at a future meeting. Lacking a Treasurers report, there was no knowledge of our current financial position.

The meeting was adjourned at about 9:30.

There was an abundance of cookies and other good things served by our hostess Maxine Armstrong. Duane Hewitt put on a demonstration of very good graphics in color with his MS-DOS system while our spouses did their visiting.

Dick Wagner

## BITS & BYTES

by: ROD GOWEN

Heard any TS related news lately? Did you get any information in the mail from other users, user groups, or vendors that may be of interest to our readers? If so, why not share it with us? We need all of the help that we can get. Please send any info that you might have to: Rod Gowen, C/O CCAT/S, 1419 1/2 7th Street, Oregon City, OR 97045, or, phone in at: 503/655-7484, NOON - 10 PM weekdays. I know that the entire user group will appreciate it!

## HAPPY NEW YEAR!-

TO ALL CCAT/S MEMBERS! We hope that you all had a great Holiday season! Did Santa remember what you needed for your computer? If not, you will just have to get for yourself! If he did, you will have plenty to do for a time. Let's make this a GREAT year!

>>>>

## MEETING NEWS!-

We have now had to miss 2 meetings in the past 8 years! Due to a prior commitment, I had to miss the get-together that was held at the home of Jack Armstrong in December. We were sorry to have missed that one. About 10 members made it, but NOT ONE ELECTED OFFICIAL was in attendance! Even though there were no officers, they proceeded to hold nominations of sorts. It seems almost as though Jack volunteered to take on the job of Chairman. Dick has volunteered to be Secretary and I will continue on as Treasurer. Bill Dunlop and his sister Alice will help with the Library work. This leaves only the job of Vice Chairperson to fill. We will not be sending out ballots this year but will have a show of hands at the January meeting to affirm Jack's position as well as the others. Be there to have your hand counted! What will be the future of CCAT/S? Be there to find out!

## UPDATES MAGAZINE-

should be out on time. Frank and Carol Davis are doing a good job so far. Let's make sure that they have a reason to keep going - SUBSCRIBE NOW! FOR ONLY \$18 PER YEAR, YOU CANNOT BEAT IT! The other way to make sure that they will want to keep doing for us is to write to them and for them. Send contributions!

## LOGICALL-

is a fairly new AOS for LK-DOS. The AOS is for "AUXILIARY OPERATING SYSTEM. BOB SWOGER of the CATUG group has really put together a fine package for all of us LK-DOS users! RMG now has this fine PD package in and will gladly make copies available for the standard \$3.50 per disk charge. As this is a 2 disk collection, RMG is offering it for \$6 for both plus shipping. For a more detailed description, send a S.A.S.E. to RMG at the address on the back of the newsletter.

# MIKE'S NOTEBOOK

By: Michael J. Di Rienzo

(NOTE: REPRINTING OR REPRODUCING THIS COLUMN WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE AUTHOR IS HEREBY PROHIBITED. FOR PERMISSION, WRITE THE AUTHOR IN CARE OF THIS PUBLICATION.)

This month's utility gives you a new WINDOW command that will place a user defined 3-D window at any location and any size on the screen using any of the eight available colors. The user can define the line, column, width, height, and color of each window. When using this utility in your own home-grown programs, WINDOW will provide an appropriate background to print text, prompts, or instructions. If used together with my GETPUT utility published previously, you can SAVE, then replace the area of the screen covered-up by the window. This program provides a graphic background only and doesn't open a new channel, so PRINT will work in its usual way. Error trapping is minimal for incorrectly sized windows, but is provided for the BASIC syntax. The syntax of this new command must be followed correctly or you will get a "Nonsense in Basic" error message. Windows that go off the screen will generate an "Integer out of range" error message. The syntax is as follows: PRINT USR window;AT L,C;W,H;A Note the commas and semi-colons. Variable "L" is the line (1-20) and "C" is the column (1-30) where you want the upper left corner of the window to appear. Variable "W" is the width (1-30) and "H" is the height (1-20) (in characters) of the window that you want to define. "A" is the attribute color (0-7) that you want to paint the window. The window shadow is always black. The CODE must be initialized by RUNNING line 200 first. The CODE is not relocatable and is 323 bytes long. Study the following demo to understand your new utility command. Have fun!

## "WINDOW"

By Michael J. Di Rienzo

Continued from page 3

```
20 PRINT USR window;AT 5,4;25,
4;5
30 PRINT PAPER 5; INK 2;AT 6,5
;"This is the window DEMO!"; FLA
SH 1;AT 7,5;"Press a key to cont
inue."
40 PAUSE 0
50 LET line=INT (1+RND*19)
60 LET column=INT (1+RND*29)
70 LET width=INT (1+RND*(31-co
lumn))
80 LET height=INT (1+RND*(21-l
ine))
90 LET color=INT (1+RND*7)
100 PRINT USR window;AT line,co
lumn;width,height;color
110 GO TO 50
200 CLEAR 49855: LET t=0
210 FOR n=49856 TO 50178
220 READ a: POKE n,a: LET t=t+a
230 NEXT n: IF t<>32454 THEN PR
INT FLASH 1;"Data Error! Recheck
DATA lines": STOP
240 RUN
250 DATA 17,117,33,225,167,237,
82,32,250,213,223,254,59,32,35,2
31,254,172,32,30,205,220,27,205,
96,38,237,67,0,195,223,254,59,32
,15,205,220,27,205,96,38,237,67,
2,195,223,254,59,40,2,207,11,205
,228,27,205,96,49,121,50,13,195
260 DATA 24,4,0,0,0,0,62,2,205,
48,18,62,17,215,62,3,215,237,91,
0,195,58,3,195,71,58,2,195,79,62
,22,215,123,215,122,215,62,32,21
5,13,32,250,28,16,236
270 DATA 253,54,86,56,33,22,0,2
37,91,0,195,205,69,23,121,50,0,1
95,58,0,195,135,135,135,50,0,195
,58,1,195,135,135,135,61,50,1,19
5,58,2,195,135,135,135,60,50,2,1
95,58,3,195,135,135,135,60,50,3,
195
280 DATA 58,1,195,79,58,0,195,7
1,205,62,38,58,2,195,79,6,0,17,1
,1,205,163,195,14,0,58,3,195,71,
30,1,22,255,205,163,195,58,2,195
,79,6,0,30,255,22,1,205,163,195,
14,0,58,3,195,71,17,1,1,205,163,
195,24,10,217,229,217,205,19,40,
217,225,217,201
290 DATA 58,3,195,71,58,0,195,1
52,61,71,46,3,229,58,1,195,60,60
,60,79,197,205,62,38,58,2,195,79
,6,0,17,1,1,205,163,195,193,5,22
5,45,32,226,58,1,195,71,58,2,195
,128,60,79,46,3,229,58,0,195,61,
61,61,71,197,205,62,38,14,0,58,3
,195,71,22,255,30,1,205,163,195,
193,12,225,45,32,225,201
```

## USING POINT!

What is POINT? Our 2068 manual simply states that POINT tells you whether a PLOT point specified by coordinates is PAPER color (0), or INK color (1). The coordinates for x range from 0 to 255 and y ranges from 0 to 175. Note: input other than PLOT also is recognized, but the results are by coordinates. I recall trying this in the early days of 2068 experiments, but it didn't seem of much value.

Sharon Aker's book, T/S 2068 BASICS and BEYOND actually put POINT to some use with this short program:

### PROGRAM #1

```
10 INPUT"Press any key ";a$
15 PRINT a$
20 PRINT AT 10,0
25 FOR y=175 TO 168 STEP-1
30 FOR x=0 TO 8
35 PRINT POINT (x,y);
40 NEXT x: PRINT: NEXT y
```

Just input any character including graphic and see the result.

For some time I have thought that there should be some way to print the pixel addresses or coordinates of a graphic figure. For practical purposes it should be a small figure as an 8x8 figure requires 128 numbers for 64 addresses if the 8x8 is all INK color. Many designs may be much less than this. If such could be accomplished, then it would be possible to provide a design to any 2068 user. So, a design equal to the space of about 4 characters should be practical to convert to addresses.

Make these change in lines 35 and 40 to get a numerical print out of a character for INPUT:

```
35 IF POINT (x,y) THEN PRINT x;"
";y
40 NEXT x: NEXT y
```

Now you have actual coordinates printed for the shape you INPUT. We are not interested in printing addresses of PAPER color. The first column is the x line and the second is the y column. Obviously the amount of information that can be displayed in this manner is very

>> >> >>

Continued from page 4  
 limited. See the 2068 manual, page 152 for a display of coordinates used on the 2068. If the whole screen was printed out in this manner the data printed would be enormous because the POINT for each part of data would also be printed! The solution is to do this on paper.

A more useful record can be obtained by sending the data to a 2040 printer. In this way the image can be any place on the screen. Make these line changes:

```
33 IF POINT (x,y) THEN LPRINT
x;",";
35 IF POINT (x,y) THEN LPRINT y;"
";
```

This gives a line print out with a comma joining two coordinate numbers and a space between addresses. Try it with RUN and see the difference. This is more like a DATA line.

The reason that all of this works is that "IF POINT (x,y)" means "ON" if it is a true statement. The next step is to work this DATA into a useable statement. This requires the numbers to be copied into DATA lines, adding commas at the spaces between addresses.

For an example, a Volkswagen BUG was used as it was 2 characters wide, being formed from a user graphic assigned to keys A and B. The basic design again was from Sharon Aker. Later, some changes were made to include parts of the next two lower character positions plus a slightly longer figure in these two character positions. Thus the figure was 9 pixels high and 20 pixels long. These changes will be described later, as well as reshaping the front end of the car. All easily accomplished! The original design can be obtained from page 116 for those with access to this book.

The next step was to develop a program to print out the coordinates for every INK 1 for this figure. At the same time a base line (road) was added. The program follows with line 20 being the LOAD command for Oliger. Just change this line to fit

the readers equipment. Line 55 adds the ability to print on all 23 lines and scroll properly. Line 25 adds the base line under the BUG. You will have to wait until you get a SCREEN\$ of BUG before you can use this next program. I will give you the data soon for this.

#### PROGRAM #2

```
10 LET a$="BUG"
20 LOAD /a$ SCREEN$
25 PLOT 0,167: DRAW 19,0
30 PRINT AT 1,0
50 FOR y=175 TO 165 STEP-1
55 POKE 23692,255
60 FOR x=0 TO 20
70 IF POINT (x,y) THEN PRINT x
;",";y;" ";
80 NEXT x: NEXT y
```

The raw DATA can be used to reproduce an image of the BUG by copying it as lines of DATA, adding commas in the spaces. However, we do not have a SCREEN\$ yet to load in for line 10. The next program with DATA will be easier to use and to change. The program will reproduce the BUG and after a SCREEN\$ save, called BUG, can be used in the above program to see the DATA that was used in the following program. As the reader does not have the image until this last step, the SCREEN\$ can be used in this way.

#### Program #3

```
100 FOR a=1 TO 125
110 LET m=175
112 LET n=174
114 LET o=173
116 LET p=172
118 LET q=171
120 LET r=170
122 LET s=169
124 LET t=168
126 LET u=167
130 READ x
135 READ y
140 DATA 5,m,6,m,7,m,8,m,9,m,10
,m
145 DATA 3,n,4,n,5,n,6,n,7,n,8,
n,9,n,10,n,11,n,12,n,12,n
150 DATA 2,o,3,o,4,o,5,o,6,o,7,
o,8,o,9,o,10,o,11,o,12,o,13,o,14
,o
155 DATA 1,p,2,p,3,p,4,p,5,p,6,
p,7,p,8,p,9,p,10,p,11,p,12,p,13,
p,14,p,15,p
```

>> >> >>

Continued from page 5

```
160 DATA 0,q,1,q,2,q,3,q,4,q,5,
q,6,q,7,q,8,q,9,q,10,q,11,q,12,q,
,13,q,14,q,15,q,
165 DATA 0,r,1,r,2,r,3,r,4,r,5,
r,6,r,7,r,8,r,9,r,10,r,11,r,12,r,
,13,r,14,r,15,r,
175 DATA 2,s,3,s,4,s,5,s,6,s,7,s,
,8,s,9,s,10,s,11,s,12,s,13,s,
180 DATA 3,t,4,t,11,t,12,t,
185 DATA 0,u,1,u,2,u,3,u,4,u,5,u,
,6,u,7,u,8,u,9,u,10,u,11,u,12,u,
,13,14,u,15,u,16,u,17,u,18,u,19,u,
20,u
200 PLOT x,y
210 NEXT a
```

Keying in this program and data will produce an image of a VW BUG at the upper left corner of the screen. To show the convenience of this last program to modify a figure, change lines 140 and delete 5,m; 145 and delete 3,n,4,n;; 150 and delete 2,o,3,o;; and 160 with delete 1,p,. Now RUN again and see a better shaped BUG. SAVE this SCREEN\$ if you like it. The SCREEN\$ of BUG can now be used in program #2 as if you had it originally.

A next step might be to look at the new expanded image with the first program. However, this image takes up 3 character spaces across the screen (x axis) and 2 character spaces up (y axis). This program must be adjusted to match the new image.

You might have a preferred screen location for the figure. Just take the last program and change the PLOT by subtracting from the y coordinate the start of the new location. And if moved across the screen, add the change in the x coordinates. Suppose the location is 50 points down and 50 points across. Line 130 READ x+50 and line 135 READ y-50 are the changes. Run and SAVE again. Also, be sure and save the program each time.

Assume you don't have the screen location of a figure on the screen. Just make a broad bracket of the location. It might look like it is in the upper half of the screen and somewhere across! Change line 50 as 50 FOR y=175 TO (166-85) STEP-1, and

line 60 as 60 FOR 0 TO 255. Now run this change and all of the INK 1 pixels will be located.

Several images can be displayed on the screen and saved back as a new SCREEN\$ by using the following program that duplicates an image across the screen, or even in various locations. The duplicating program is very simple and works like a charm. The program starts with a VW BUG developed previously and saved. Then it is combined into 2 VW BUGS and saved as a SCREEN\$ called BUGS. Line 210 provides for 9 pixel rows and line 220 produces a figure 39 pixels long including the original figure, 19 being added to the first 20.

#### Program #4

```
200 LOAD /"BUG"SCREEN$
210 FOR y=175 TO 175-8 STEP-1
220 FOR x=0 TO 19
230 IF POINT (x,y) THEN PLOT x+
20,y
240 NEXT x: PRINT: NEXT y
250 SAVE "BUGS"SCREEN$
```

Save this program and the SCREEN\$ of the 2 BUGS. Now that there are 2 BUGS we will join them into a total of 12 BUGS, adding 10. The following program will demonstrate how to make a border of "Volkswagen Bugs On Parade"

#### Program 5

```
110 LOAD "BUGS"SCREEN$
120 REM this image is from
program #4
130 FOR Y=175 TO 175-8 STEP-1
140 IF POINT (x,y) THEN PLOT x+
20,y
150 IF POINT (x,y) THEN PLOT x+
40,y
160 IF POINT (x,y) THEN PLOT x+
60,y
170 IF POINT (x,y) THEN PLOT x+
80,y
180 IF POINT (x,y) THEN PLOT x+
100,y
190 NEXT x: PRINT: NEXT y
200 PRINT AT 2,0;"--Volkswagen
Bugs On Parade--"
```

Dick Wagner



--Volkswagen Bugs On Parade--

# *the plotter*

## pc page

*by: Rod Gowen*

Well, after a month off, we are back! I hope you missed us! if we are to be doing any good at all with this column, we must be read and, if we are missing, we should be missed! Let us know if you do!

We are going to let DICK WAGNER do the honors again this month with a bit of useful (we hope) information for you beginner PC/MS-DOS users. We do welcome any and all items contributed to this column. I do not know what Dick has in store for us, but will look forward to it with you.

We at RMG continue to build and update our ever-growing PC Shareware library. At the rate of about 1-2 megabytes per week. A lot of the old software is being updated every so often and a lot of new software is showing up. We have the 1990 AMTAX shareware income tax program in now. This is a real nice program. It will not print the forms but will sure do the figures for you! We have data base and spreadsheet programs as well as CAD and word processors. Let us know if you are looking for something in particular. We will do our best to find it for you.

As we have not had a regular meeting for the last 2 months, we have not had a PC meeting either. If you want to talk about a problem of project that you are having or doing with your PC, come to the January meeting and bring it up! Maybe someone can help you! After all, that is what it is all about, helping each other. Whether it be with TS or PC equipment, we all need help from time to time. Some more than others. Remember when you got your first Sinclair or TS computer? Were you looking for help? Weren't we all? Isn't that why CCAT/S was formed? Isn't that what will keep us going? We cannot afford to be TS SNOBS! I CERTAINLY DO NOT want to forget or forsake our faithful TS computers. I, for one, still use my trusty 2068 daily! I see no reason to stop using it for the jobs that it does so well! Let us continue to support the trusty old machines as well as allowing for growth in our group. After all, do we want to disband the group or keep it going?

I now turn it over to Dick. See you next time. . .

### USING BASIC WITH MS-DOS

About a dozen of ours members are using an IBM clone computer, or a MS-DOS emulator with QL computers, in one way or another. I have been doing some trial and error work with Microsoft GWBASIC. Until I purchased a good book on GWBASIC, I was really floundering. All BASIC languages are not the same, at least as far as disk handling. There are commands and instructions for the various types of DOS we use with our 2068 computers. So, how does one find comparable command in GWBASIC?

Just to get started, there are two commands in GWBASIC, FILES and SHELL. These are described in the computer manual and have to do with disk operations such as reading the BASIC disk catalog or directory, or even the MS-DOS directory while in BASIC.

>> >> >>

Continued from page 7

Assume the BASIC operating program is in drive "B" and the MS-DOS disk is in drive "A" and you have keyed in GWBASIC (or whatever BASIC you are using). The command FILES will give the directory of drive "B". To access the MS-DOS directory, use FILES "A:". This is only a temporary switch and the cursor will appear on the display right where it was before the switch.

Assume a specific file in drive "A" is desired while in drive "B" BASIC. Type FILES "A: name. ext" to get that file to use. There are only .BAS and .COM files, I believe, that can be used in BASIC.

Assume you wish to return to MS-DOS from BASIC. Use SHELL for this. The computer will now be operating with MS-DOS. To return to specific MS-DOS program or command, key in SHELL "A: name .ext". Notice the use of double quotes in these commands.

Now you wish to return to BASIC from MS-DOS. Key in EXIT. I am not sure that this returns you to where you left BASIC--try it and see.

Now you are all through with BASIC and wish to return to MS-DOS. Be sure to SAVE any program material you have produced, using function key F4. Key in SYSTEM to close BASIC and to return to MS-DOS.

Question, why work with GWBASIC when all of those prepared programs and utilities are available in MS-DOS? Well, we all spent a lot of time and effort to use Sinclair BASIC, so why give it up? Plus, I am still waiting for members to come forth with programs they have produced in MS-DOS. If they can't program in MS-DOS, then try GWBASIC. It can be done as I have a game program that is in MS-DOS. To show how GWBASIC is similar to Sinclair BASIC, type in the following program.

A few comments will help to produce interesting displays. The input is in degrees and the most interesting seem to be from 1 to 180. An input of less than 90 degrees will cause the image to "unwind". Save the program first with function key F4. F2 will give the RUN command. The 10 function keys are listed at the bottom of the screen.

Dick Wagner

```
10 'for DEGREES use 360 to 0
20 'in ranges 90 to 180 use odd number
30 'such as 179, 167, etc
35 'Degrees of 90 and less will unwind the image.
50 SCREEN 1:COLOR 4,5:KEY OFF:CLS
60 LOCATE 12,10:PRINT "***** SPIRALS ***** ":FOR DELAY = 1 TO 5000:NEXT:CLS
105 LINE INPUT "ENTER NUMBER OF DEGREES=";D$:D=VAL(D$)
106 CLS
140 D=D/57.29578:'Convert degrees to radians
150 PSET (130,96),1
160 FOR R=0 TO 100 STEP D/2
170 X=R*COS(R):X=X+130:Y=R*SIN(R):Y=Y*.7+96
210 LINE -(X,Y),3
220 NEXT R
230 PAINT (100,1),3
240 FOR DELAY =1 TO 9000:NEXT:CLS:GOTO 105
```

```

5 REM ski run game
6 REM a hit is counted if you
pass on the open side of the
gate
8 REM you must pass on the
point side of the gate.
10 RANDOMIZE 0
15 REM use < and > for <> in 1
ine 20.
20 LET b$="<>"
30 CLS
40 DIM c(26,2)
50 GO SUB 5000
60 GO SUB 1000
70 LET t=0
80 LET p=0
90 LET x=16
100 GO SUB 2000
110 GO TO 4000
1000 FOR i=1 TO 25
1010 LET c(i,1)=INT (RND*5)+5
1020 LET c(i,2)=INT (RND*25)+4
1030 NEXT i
1040 LET c(1,1)=21
1050 RETURN
2000 POKE 23692,255: PRINT AT 21
,c(1,2);">";
2010 LET k=1
2020 LET j=0
2030 LET m=0
2040 LET i=2
2050 LET s=0
2060 LET s=s+1
2070 LET t=t+1
2080 PRINT AT 21,0;"
2090 GO SUB 3000
2100 IF s<>c(i,1) THEN GO TO 206
0
2110 POKE 23692,255: PRINT AT 21
,c(i,2);b$(j+1);
2120 LET j=NOT j
2130 LET i=i+1
2140 IF i<26 THEN GO TO 2050
2150 FOR i=1 TO 23
2160 LET t=t+1
2170 POKE 23692,255: PRINT AT 21
,0;"
2180 GO SUB 3000
2190 NEXT i
2200 RETURN
3000 LET a$=INKEY$
3010 IF a$="5" THEN LET x=x-1
3020 IF a$="8" THEN LET x=x+1
3030 PRINT AT 0,x;"*";
3040 IF t<>c(m+1,1) THEN RETURN
3050 LET t=0
3060 LET m=m+1
3070 LET k=NOT k
3080 IF NOT k AND (x-c(m,2))>0 T
HEN RETURN
3090 IF k AND (x-c(m,2))<0 THEN
RETURN

```

```

3100 LET p=p+1
3110 BEEP .05,20: PRINT "h"
3120 RETURN
4000 PRINT
4010 PRINT "You hit ";p;" gates"
4020 PRINT "Do you want to try a
gain ?";
4030 INPUT a$
4040 PRINT a$
4050 IF a$(1)="n" OR a$(1)="N" T
HEN STOP
4060 IF a$(1)<>"y" OR a$="Y" THE
N GO TO 4020
4070 PRINT "Same course?";
4080 INPUT a$
4090 PRINT a$
4100 IF a$(1)="y" OR a$(1)="Y" T
HEN GO TO 70
4110 IF a$(1)<>"n" OR a$(1)="N"
THEN GO TO 4070
4120 GO TO 60
5000 CLS
5010 PRINT
5020 PRINT TAB 8;"SKI RUN"
5030 PRINT TAB 8;"-----"
5040 PRINT
5050 PRINT "You have to ski down
a course"
5060 PRINT "of 25 flags."
5070 PRINT
5080 PRINT "You must pass to the
left of <"
5090 PRINT " and to the right of
> to not have a hit."
5100 PRINT
5110 PRINT "You can move to the
right and"
5120 PRINT "left by pressing the
arrow keys"
5130 PRINT "(5 and 8)"
5140 PRINT
5150 PRINT "press any key to sta
rt"
5160 IF INKEY$="" THEN GO TO 516
0
5165 CLS
5170 RETURN

```

```

2 REM program by Roy Wisti
with revisions by Dick Wagner
5 REM after the first RUN
then use RUN 20 for the displays
8 REM the displays of the
MAZE changes with each RUN 20
10 FOR f=144 TO 144+4: FOR g=0
TO 7
12 READ a: POKE USR CHR$ (f+g)
,a
18 NEXT g: NEXT f:
>>>>

```

Continued from page 9

```
20 FOR f=1 TO 704
22 PRINT INVERSE 1;CHR$( (RND*
3.5)+144);:
23 NEXT f
30 PLOT 0,0: DRAW 255,0: DRAW
0,175: DRAW -255,0: DRAW 0,-175
50 DATA 24,24,24,219,219,24,24
52 DATA 24,24,0,255,255,0,24,2
4
54 DATA 24,56,112,227,199,24,2
8,24
56 DATA 24,28,14,199,227,112,5
6,24
```

## FROM THE EDITOR'S DESK

The last two meetings have presented problems with nominations for 1991 officers. We do have Jack Armstrong running for Chairman, and Bill Dunlop was pressed into volunteering for the Vice Chairman position. Dick Wagner had previously volunteered to be the Secretary. With only 2 positions to vote on and no one contesting so far, Rod and I decided not to issue ballots. Hopefully, we can get the election overwith at the January meeting. If there are any objections from members, please feel free to call Rod.

## -NOTICE-

Opinions expressed in articles are not necessarily those of members of the Clackamas County T/S User Group. Meeting minutes carry the consensus of members present at meeting. This newsletter nor staff will not be held liable for any damage or consequences due to following instructions, or review of products as contained in this newsletter.

## SUBSCRIPTION RATES

FREE SUBSCRIPTION WITH PAID  
CCAT/S MEMBERSHIP-\$15.00/YR

## PLACE YOUR AD HERE

## AD RATES

\*\*\*\*

1 FOUR LINE CLASSIFIED FREE  
WITH MEMBERSHIP

\$ .50 / LINE  
\$ 5.00 / 1/4 PAGE  
\$ 8.00 / 1/2 PAGE  
\$ 15.00 / FULL PAGE

ALL AD COPY MUST BE IN BY  
THE 10TH OF THE MONTH PRIOR  
TO THE MONTH AD IS TO RUN.

- 10 -

## CCAT/S

1419 1/2 7TH Street  
Oregon City, OR 97045

ROD GOWEN (TREASURER)  
1419 1/2 7TH STREET  
OREGON CITY, OR 97045  
A0003:12<90/ML